

Elements of a Successful Travel Model Development Project

Memphis Travel Model

FHWA/TMIP Peer Review

October 27, 2004 Memphis, TN

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Thinking About The Issues

Mistakes I've made and lessons I've learned

Trying to get the right elements in place from the beginning

Thinking about things in a process oriented framework

Based on working with over 200 models in 40 states and 15 countries

Largely concerned with the new needs emerging due to changes in technology, user needs, and available data



My Top Nine

- A good understanding of the client's needs and expectations
- 2) The right technical resources and support
- 3) A well thought out plan with room for responding to contingencies
- 4) A structured approach including incremental implementation strategies
- 5) An overall vision recognizing the need for integration of all project/product aspects

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My Top Nine

- 6) An embedded testing and quality assurance model which will identify and lead to correction of most process and procedural errors
- 7) A workable strategy for knowledge and technology transfer
- 8) Attention to system, database, process and interface design to address longer term client needs
- 9) Informed oversight



A good understanding of the client's needs and expectations

- What technical limitations in the current process are we trying to overcome?
- What are the public and community issues and concerns we're trying to respond to?
- How does travel modeling fit into the larger context of regional planning?

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The right technical resources and support

- Do we have the right staff committed to the project in a timely way?
- Have we evaluated the full range of needs and are all the right tools in place?
- Do we have complete compatible data and a plan for processing it?



A well thought out plan with room for responding to contingencies

- Have we adequately assessed the risks of completion and changes?
- Are we prepared to respond to those risks?
- Do we have have an agile planning process in place that can keep pace with implementation?

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An overall vision recognizing the need for integration of all project/product aspects

- Does our implementation framework address a full range of development and application needs?
- Is there a workable plan for consultant -> agency transition?
- Can we seamlessly move from calibration/validation to forecasting?



An embedded testing and quality assurance model ...

- Have we developed a structured approach to module and full system testing and review?
- Will we have facilities to generate necessary test outputs in place?
- Is there a plan for test documentation and logging?
- Do we have an integrated strategy for input validation?

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Informed Oversight

- Knowledge of and linkages to specific outside (I.e. Federal) programs and requirements?
- Peer knowledge of similar work and lessons learned?
- "Over the shoulder" independent review of similar work and specific technical elements?
- On-call counsel on unresolved or complex issues?